

### HL108E HomePlug AV

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# **About the Product**

HomePlug AV is a device that utilizes the existing electrical wiring in the house as a path to create a secured network of computers and Ethernet devices. HomePlug AV is ready to use out of the box and it does not require a device driver to work. With a maximum data rate of 200 Mbps, HomePlug AV can reliably handle high requirement applications like Internet telephony, streaming of high quality video, and Internet simultaneously.

HomePlug AV is operating system independent. It can be connected to any device using Windows, Macintosh, or Linux operating systems. Encryption is built-in the HomePlug AV design. To change the encryption settings, however, you need a computer with a Windows operating system.

### **Package Contents**

The package contains the following items:

- 1 HomePlug AV for Single Pack or 2 HomePlug AVs for Twin Pack
- 1 Network cable for Single Pack or 2 network cables for Twin Pack
- Resource CD
- Easy Start Guide

### Requirements

HomePlug AV requires an Ethernet port to connect with another device.

### **Device Design**

HomePlug AV has three LED indicators and an Ethernet port.



Label	Status	Description/ Function
PWR	On/Off	Power is on/off.
	0n/0ff	Another HomePlug is detected/not detected.
PL-ACT	Flashes	PL-ACT flashes whenever there is data transmission within the network. However, the PL-ACT for the HomePlug AV device that powers on first will stay on even when data is being transmitted.
	On/Off	Ethernet is connected/not connected.
ETH-LINK/ACT OFF	Flashes	Sending/receiving data.
Ethernet Port		Accepts either cross or straight cable.

# **Getting Started**

Setting up the device is easy. The flowchart below provides an outline of the steps you need to go through. Some steps are required while some are optional. There are brief descriptions beside each step to help you along. Detailed instructions are provided in the subsequent pages.



### **Planning your Network**

Here are ideas on how you can use HomePlug AV.

#### Local Network

Share ultra fast Internet connection with any computer wherever it is in the house.



#### Gaming Network

Connect your gaming console into the Internet and compete with other online players.



#### **Entertainment Network**

Experience the distinction of viewing and listening to media files using your entertainment system.



#### Media Network

Realize your high-tech lifestyle by converging your IP devices into a single network.



### **Remove/Disable Conflicts**

You may need to check the TCP/IP and Internet properties to make sure there are no conflicts with the way devices in the network are identified.

### TCP/IP

HomePlug AV's IP Address should be obtained automatically.

#### To set the TCP/IP properties:

- 1. Select Start > Run. This opens the Run dialog box.
- 2. Enter control ncpa.cpl and then click OK. This opens the Network Connections in your computer.
- 3. Right-click LAN and then select Properties. This opens the Local Area Connection Properties dialog box.
- 4. Select Internet Protocol (TCP/IP) and then click Properties. This opens the Internet Protocol (TCP/IP) dialog box.
- 5. Select Obtain an IP address automatically.
- 6. Click OK to close the Internet Protocol (TCP/IP) dialog box.
- 7. Click OK to close the Local Area Connection Properties dialog box.

#### **Internet Properties**

#### To set the Internet Properties:

- 1. Select Start > Run. This opens the Run dialog box.
- 2. Enter control inetcpl.cpl and then click OK. This opens the Internet Properties dialog box.
- 3. Click Connections tab.
- 4. In the Dial-up and Virtual Private Network settings pane, select Never dial a connection.
- 5. Click OK to close the Internet Properties dialog box.

### **Connecting the Device**

HomePlug AV does not require the installation of a device driver. It is a plug-and-play device that can be used right after connecting the network cables and plugging it into a power outlet.

#### To connect HomePlug AV with your computer:

- 1. Insert one end of the network cable into your computer's Ethernet port.
- 2. Insert the other end of the network cable into HomePlug AV.
- 3. Plug HomePlug AV into a power outlet.

# About HL108E HomePlug AV Utility

HL108E HomePlug AV Utility is a software application that allows you to configure HomePlug AV. It is mainly used for changing the Private Network Name and detecting other HomePlug AV's in the network. Installation is straightforward and the user interface is easy to use.

**Note:** The .NET Framework is required to open HL108E HomePlug AV Utility.

### Requirements

Your computer must meet the following requirements:

#### Software

- Windows 98SE, ME, 2000, or XP 32-bit, and Vista 32-bit
- .NET Framework 1.1 or above

#### Hardware

- 300 MHz Processor
- Network Interface Card
- CD-ROM
- 128 Mb of free hard disk space
- 128 Mb of RAM

### Installation

#### To install HL108E HomePlug AV Utility:

- 1. Insert the Resource CD that comes with HomePlug AV into the CD-ROM drive.
- If the installer does not launch automatically, select Start > Run, enter D:\Setup.exe (where D: is your CD-ROM drive), and then click OK.
- 3. Follow the instructions on the Utility.

Two applications will be installed in your computer - HL108E HomePlug AV Utility will be installed first followed by .NET Framework. The installer detects any version of .NET Framework in your computer. If .NET Framework is not installed, a dialog box opens to ask if you would like to install .NET Framework 1.1. Click Yes. The .NET Framework will not be installed if a version is already in your computer.





#### Notes:

When you configure local and remote HomePlug AVs, it is recommended to keep a list of your HomePlug AV Device ID's. This is printed at the back of the device.
In case you cannot connect into the network or Internet, you may have to power cycle the device. To power cycle, disconnect and reconnect HomePlug AV from the power outlet.

### **Opening HL108E HomePlug AV Utility**

#### To open HL108E HomePlug AV Utility:

- Right-click HL108E HomePlug AV Utility desktop shortcut and then select Open.
- Or, select Start > All Programs > Aztech HomePlug > HL108E HomePlug AV > Aztech Hl108E Utility.

### HL108E HomePlug AV Utility User Interface

The HL108E HomePlug AV Utility user interface is divided into tabs. These tabs include:

- Home
- Private Network Name
- Quality of Service
- Devices
- Firmware Upgrade

#### Home

Home provides a list of all the possible tasks you can perform in this Utility. To start a task, you need to specify which network card is connected to your HomePlug AV device. This is most helpful when you have more than one network card in your computer.

🖶 Aztech HL108E HomePlug AV (	Utility v1.0	
Aztech		
Home Private Network Name Quality of Service Devices	Home Select a network card before performing any task. Skip this step if you have only one network card. The Device MAC Address will be displayed automatically. If a device is not detected with your network card, 00:00:00:00:00:00 will appear. <b>1. Select a network card</b> Metwork Card Device\(c11954b7-29ab-48e0-82c Device MAC Address D0:00:00:00:00 <b>2. Select a task</b> <u>Change the Private Network Name</u> <u>Change the QoS settings</u> <u>-View devices in the network</u>	
Firmware Upgrade	- Update the firmware	

#### Home

#### Private Network Name

Private Network Name provides the function to change the Private Network Name of local and remote HomePlug AVs. A Private Network Name acts as an authentication mechanism against network eavesdroppers. By default, the Private Network Name is HomePlugAV.

Always remember that a HomePlug AV can only communicate with other HomePlug AVs using a similar Private Network Name. If you intend to create multiple networks, you can assign different Private Network Names among your devices. You have to, however, make sure that at least two HomePlug AVs have similar Private Network Names. A HomePlug AV that uses a unique Private Network Name will not be able to communicate with other HomePlug AVs.

🖶 Aztech HL108E HomePlug	AV Utility v1.0	
Aztech		
Home Private Network Name	Private Network Name of a local device, enter the Private Network Name and then click Apply. For remote devices, additional steps are required. Select Change Private Network Name of remote device and then enter the Device ID.         Network Name to be set         Private Network Name:	
Devices Firmware Upgrade	Change Private Network Name of remote device Device ID Apply	

Private Network Name

#### Local Private Network Name

Local Private Network Name refers to the Private Network Name of the HomePlug AV, which is directly connected to the computer running HL108E HomePlug AV Utility.

#### To change the local Private Network Name:

- 1. Open HL108E HomePlug AV Utility.
- 2. Click Private Network Name.
- 3. Enter the new Private Network Name. This field is case sensitive.
- 4. Click Apply. HomePlug AV restarts and saves the new Private Network Name.

#### Remote Private Network Name

Without leaving your computer, you can change the Private Network Name of remote HomePlug AV devices, provided they are connected to the network using the same Private Network Name as your local HomePlug AV.

#### To change a remote Private Network Name:

- 1. Open HL108E HomePlug AV Utility.
- 2. Click Private Network Name.
- 3. Enter the new Private Network Name. This field is case sensitive.
- 4. Select Change Private Network Name of remote device.
- 5. Enter the Device ID of the remote device. The Device ID is printed on the device.
- 6. Click Apply. The remote HomePlug AV restarts and saves the new password.

#### Quality of Service

Quality of Service gives you the capability to prioritize particular applications within your network. QoS is not enabled by default.

#### **QoS Modes:**

- Online Game/Internet mode prioritizes data streaming.
- Audio or Video prioritizes multimedia streaming.
- Voice over IP prioritizes voice applications.

🖶 Aztech HL 108E HomePlug	g AV Utility v1.0		
Aztech			
Home	QoS Enable QoS		
Private Network Name		T	
Quality of Service		Contraction of the second	202
Devices	Online Game/Internet	Audio or Video	Voice over IP
Firmware Upgrade	Аррју		



#### To enable QoS:

- 1. Open HL108E HomePlug AV Utility.
- 2. Click Quality of Service.
- 3. Select Enable QoS.
- 4. Click a QoS mode.
- 5. Click Apply.

#### Devices

Devices displays information about HomePlug AV's detected in the network.

🖶 Aztech HL108E HomePlug AV Ut	ility v1.0					
Aztech						
Home	Remote Devices					
	TEI	Device MAC Address	Bridge MAC Address	Transmit(Mbps)	Receive(Mbps)	1
Private Network Name						
Quality of Service						
Devices						
Firmware Upgrade						

#### Devices

Devices displays the following parameters:

TEI Refers to the Terminal Equipment Identifier.

**Device MAC address** HomePlug AV MAC Address.

**Bridge MAC Address** Refers to the MAC Address of the Ethernet network adapter connected to the HomePlug AV.

PHY Rate includes the Transmit and Received bit rates.

#### Firmware Upgrade

Use Firmware Upgrade to upgrade the firmware.

🖶 Aztech HL108E HomePlug A\	/ Utility v1.0	
Aztech 🦯		
Home Private Network Name	Firmware Upgrade Select the firmware location, and then click Upgrade. Current Firmware displays the firmware version of the selected device.	
Quality of Service	Current Firmware	
	Firmware Location Brows	e
Devices Firmware Upgrade	Upgrade	



#### To upgrade the firmware of a HomePlug AV:

- 1. Open HL108E HomePlug AV Utility.
- 2. Click Firmware Upgrade.
- 3. Click Browse to select the location of the upgrade file. This file is downloaded from the product Web site with a file extension of NVM.
- 4. Click Upgrade.

# **Regulatory Compliance Notices**

### FCC Statement

This equipment has been tested and complies with the specifications for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment or devices
- Connect the equipment to an outlet other than the receiver's
- Consult a dealer or an experienced radio/TV technician for assistance

### **European Regulations**

The product has been designed, tested and manufactured according to the European R&TTE directive 1999/5/EC.

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# \land Safety Warnings

For your safety, be sure to read and follow all warning notices and instructions.

- Do not open the device. Opening or removing the device cover can expose you to dangerous high voltage points or other risks. Only qualified service personnel can service the device. Please contact your vendor for further information.
- Do not use your device during a thunderstorm. There may be a risk of electric shock brought about by lightning.
- Do not expose your device to dust or corrosive liquids.
- Do not use this product near water sources.
- Make sure to connect the cables to the correct ports.
- Do not obstruct the ventilation slots on the device.